REMARKS

This is in response to the Official Action currently outstanding in the above-identified application, which Official Action the Examiner has designated as being FINAL

Claims 1-34 were originally presented. Claims 1-25 were elected for further prosecution and Claims 26-34 were cancelled, without prejudice. Claims 35-45 were added by the next previous Amendment. The present Amendment amends Claims 2 and 9, and cancels Claims 4 and 7. The present Amendment does not proposed the addition of any further claims. Accordingly, upon the entry of the foregoing Amendment, the claims under active prosecution in this application will be Claims 1-3, 5-6, 8-25 and 35-45.

The claims as they will stand upon the entry of the foregoing Amendment are set forth in full herein as required by the Rules.

In the currently outstanding Official Action, the Examiner has:

 Acknowledged Applicants' claim of foreign priority under 35 USC 119(a)-(d), and to confirmed the safe receipt of the priority document for this application by the United States Patent and Trademark Office.

- 2. Failed to provided Applicants with a copy of the Form PTO-1449 that Accompanied their Information Disclosure Statement in the above-identified application duly signed, dated and initialed by the Examiner to confirm his consideration of the art cited therein as indicated as being enclosed in the Official Action Summary. Applicants, however, note that a copy of this Form PTO-1449 accompanied the previous Official Action in this case and that the copy referred to in the present Official Action, therefore, would be unnecessarily duplicative.
- 3. Indicated that Claims 1, 5, 8-10, 12, 14, 16, 18, 20, 22, 24 and 35-45 are allowed. Applicants respectfully note with respect to Claim 9 that while the Examiner has agreed that the rejection of that claim under 35 USC 112 should be withdrawn, that claim still is dependent upon Claim 2 that the Examiner has not allowed. Accordingly, Claim 9 has been amended by the foregoing amendment so as to be stated in independent form including all of the limitations of its base claim (claim 2 prior to the present amendment) and any intervening claims so as to correct the Examiner's inadvertent failure to note the dependent nature of Claim 9 in his allowance of the same.
- 4. Objected to Claims 4 and 7 as being dependent upon a rejected base claim, but indicated that those claims would be allowable if rewritten in independent form including all of the limitations of their respective base claims and any intervening claims. Applicants have cancelled Claims 4 and 7 by the foregoing amendment as being duplicative of allowed Claims 35 and 36.

- 5. Approved the Applicants proposed drawing changes. A Transmittal of New Formal Drawings has been filed as required under the Rules.
- 6. Rejected Claim 2 under 35 USC 103(a) as being unpatentable over the Cairns, et al. reference (U.S. Patent No. 6,266,041).
- 7. Rejected Claims 3, 6, 11, 13, 15, 17, 19 and 21 under 35 USC 103(a) as being unpatentable over the Cairns, et al. reference in view of the Ogawa reference (U.S. Patent 6,018,331).
- 8. Rejected Claims 23 and 25 under 35 USC 103(a) as being unpatentable over the Cairns, et al. reference in view of the Ogawa reference, and the Ino, et al reference (U.S. Patent 5,903,014).
- 9. Provided Applicants with a Statement of his Reasons for Allowance of the allowed claims specified hereinabove and his response to Applicants' argument as presented in response to the previous non-final Official Action in this case.

With regard to items 1-5 and 9, further detailed discussion in these Remarks is not believed to be necessary.

With respect to items 6 through 8 above, Applicants respectfully request entry of the above stated amendment to Claim 2 and reconsideration of the currently outstanding rejections directed to claim 2 and all of the claims directly or indirectly dependent thereon. Applicants' bases for this request for reconsideration are two-fold.

First, in response to the Examiner's observation that claim 2 at present does not specifically recite the initialization of the shift register at power-on as well as at regular intervals thereafter in substantially the same manner as at power-on, Applicants hereinabove have amended Claim 2 so as to specifically include those features. Applicants respectfully submit that no new matter is introduced by this amendment. It is respectfully submitted that this view is supported by the facts that the disconnection of at least one of the latch circuits at regular intervals separately controlled from the normal switching of the latch circuits was previously contemplated by the language of the claim and that the specification clearly indicates that the initialization that takes place due to such a disconnection of a latch circuit causes the same initialization sequence as power-on.

Second, a key element to the support necessary to establish a prima facie case of obviousness is that there must be a suggestion to make the combination with the features of the invention contained within the prior art relied upon. In other words, the Examiner must establish why a person of ordinary skill in the art at the time the invention was made would have been motivated by that art to make the invention at issue. In particular, in cases such as this wherein the reference does not expressly or impliedly suggest the claimed invention, the Examiner has an obligation to present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the reference. See, Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985); In re Dembiczak, 175 F.3d 994, 50 USPQ2d 1614 (Fed Cir. 1999); McGinley v. Franklin Sports Inc., 262 F. 3d 1339, 60 USPQ2d 1001 (Fed Cir. 2001)); In re Sang Lee, 277 F.3d 1338, 61 USPQ2d 1430 (Feb Cir. 2002); In re Huston, (Slip Op. 02-1048 (Fed Cir. October 2002)) The Examiner in the present application has failed to provide the Applicants with such a convincing line of reasoning. Consequently, it is respectfully submitted that the Examiner has failed in his burden of establishing a prima facie case in support of his rejections under 35 USC 103, and that the currently outstanding rejections should be found to be insufficient.

Specifically, the Examiner has not established any basis for his assertion that the circuit shown in Fig. 3 of the Cairns reference operates in the manner that he attributes to it. Instead, the Cairns reference simply states that: "...it is known to apply state controlled clocking schemes to the shift register" (see Cairns, Col. 2, lines 31-32), and claims that the programmed shift elements of the shift register contain more than one occurrence of each logic state (see, Cairns Claim 1). There is no specific teaching, disclosure or suggestion in the Cairns reference of which Applicants are presently aware to the effect that "the left most switching circuit 23 electrically disconnects the left most plurality of DDF circuits from the clock signal <u>at regular intervals</u> determined by the output of the left most OR gate 22 as shown in Fig. 3" (emphasis added) as the Examiner suggests in the currently outstanding rejection.

In fact, quite the opposite of the foregoing appears to be the case in view of the Examiner's own characterization that "Cairns discloses the signals HSYNC is vary in accordance with the pulse signal transferred and a plurality of switching circuits 23 each connect and disconnect corresponding to the latch circuit to/from the clock signal line CL". Thus, Cairns may disclose a variable operation of the switching circuits that transfer a pulse signal sequentially along the shift register, but there is no disclosure that at least one of the switching circuits disconnects at least one of the latch circuits from the clock signal line at power on and at regular intervals thereafter in response to cyclic signals separate from the control signals that control the normal operational switching of the connections of the latch circuits to the clock as the pulse travels along the shift register as now specifically proposed to be claimed.

Accordingly, the Examiner's rejection is respectfully submitted to be insufficient to establish a *prima facie* case supporting his conclusion of the obviousness of the rejected claims of this application. In view of the foregoing amendment and argument, reconsideration of the Examiner's outstanding rejections under 35 USC 103(a) in response to this submission is respectfully requested.

For each, and all, of the foregoing reasons, Applicants respectfully submit that the Examiner's currently outstanding rejections are in error, and that Claims 1-3, 5-6, 8-25 and 35-45 of this application as now presented are in condition for allowance. Consequently, entry of the foregoing Amendment, reconsideration, and allowance of this application in response to this communication all are respectfully requested.

Applicants also believe that additional fees beyond those submitted herewith are not required in connection with the consideration of this response to the currently outstanding Official Action. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge and/or credit Deposit Account No. **04-1105**, as necessary, for the correct payment of all fees which may be due in connection with the filing and consideration of this communication.

Respectfully submitted,

Date: October 30, 2003

By: Dund a. Turker

David A. Tucker Reg. No. 27,840 Attorney for Applicant(s)

EDWARDS & ANGELL, LLP P.O. Box 9169 Boston, Massachusetts 02209 (617-517-5508) 353187